Claims

We claim:

1. A dispensing container for dispensing a substance from an interior portion of the container, the container comprising:

one or more walls, at least one of the walls defining a dispensing opening through which the substance may be discharged from the interior portion of the container, and at least one of the walls defining an air-admission opening through which air may be readmitted into the container;

a valve system for facilitating the discharge of the substance from the container, said valve system comprising:

a first valve that is adapted for: (a) preventing passage of the substance through the dispensing opening as long as a pressure difference between the interior portion of the container and the exterior of the container is smaller than a first predetermined limit value; and (b) allowing the passage of the substance through the dispensing opening when the pressure difference between the interior of the container and the exterior of the container is larger than the first predetermined limit value; and

a second valve that is adapted for: (a) allowing the readmission of air into the container through the air-admission opening as long as the pressure difference between the interior of the container the exterior of the container is smaller than a second predetermined limit value; and (b) preventing the readmission of air into the container through the air-admission opening when the pressure difference between the interior of the container and the exterior of the container is larger than the second predetermined limit value, wherein:

the second valve comprises a flexible material and is in the form of a lip that is capable of selectively closing the air-admission opening, and

the first valve comprises: (a) a closure part, and (b) at least one flexible crosspiece for maintaining the closure part in a position in which the closure part obstructs the dispensing opening and thereby prevents the passage of the substance through the dispensing opening as long as a pressure difference between

the interior of the container and the exterior of the container is smaller than the first predetermined limit value.

2. The valve system of Claim 1, wherein the closure part is substantially conical.

3. The valve system of Claim 1, wherein the at least one flexible crosspiece is configured to flex when the pressure difference between the interior of the container and the exterior of the container is larger than the first predetermined limit value, and to thereby allow the closure part to move so that the closure part does not prevent the passage of the substance through the dispensing opening.

4. The valve system of Claim 1, wherein the valve system comprises a plurality of the flexible crosspieces.

5. The valve system of Claim 1, wherein the at least one flexible crosspiece is substantially S-shaped.

6. A dispensing container for dispensing a substance from an interior portion of the container, the container comprising:

one or more walls, at least one of the walls defining a dispensing opening through which the substance may be discharged from the interior portion of the container, and at least one of the walls defining an air-admission opening through which air may be readmitted into the container;

a valve system for facilitating the discharge of the substance from the container, said valve system comprising:

a first valve that is adapted for: (a) preventing passage of the substance through the dispensing opening as long as a pressure difference between the interior portion of the container and the exterior of the container is smaller than a first predetermined limit value; and (b) allowing the passage of the substance through the dispensing opening when the pressure difference between the interior of the container and the exterior of the container is larger than the first predetermined limit value; and

a second valve that is adapted for: (a) allowing the readmission of air into the container through the air-admission opening as long as the pressure difference between the interior of the container the exterior of the container is smaller than a second predetermined limit value; and (b) preventing the readmission of air into the container through the air-admission opening when the pressure difference between the interior of the container and the exterior of the container is larger than the second predetermined limit value, wherein:

the second valve comprises a flexible material and is in the form of a lip that is capable of selectively closing the air-admission opening, and

the container forms a neck in the region of the dispensing opening, the air-admission opening being located in a side wall of the neck.

7. The valve system of Claim 6, wherein the dispensing opening is located at an end of the neck that is located opposite the container.

8. The valve system of Claim 6, wherein the neck has a round or oval cross section.

9. The valve system of Claim 6, wherein the valve system comprises a plurality of air-admission openings adjacent the neck.

10. The valve system of Claim 9, wherein the second valve comprises a sleeve-like lip that runs around the inner wall of the neck and is capable of closing all of the air-admission openings for sealing purposes.

11. A dispensing container for dispensing a substance from an interior portion of the container, the container comprising:

one or more walls, at least one of the walls defining a dispensing opening through which the substance may be discharged from the interior portion of the container, and at least one of the walls defining an air-admission opening through which air may be readmitted into the container;

a valve system for facilitating the discharge of the substance from the container, said valve system comprising:

a first valve that is adapted for: (a) preventing passage of the substance through the dispensing opening as long as a pressure difference between the interior portion of the container and the exterior of the container is smaller than a first predetermined limit value; and (b) allowing the passage of the substance through the dispensing opening when the pressure difference between the interior of the container and the exterior of the container is larger than the first predetermined limit value; and

a second valve that is adapted for: (a) allowing the readmission of air into the container through the air-admission opening as long as the pressure difference between the interior of the container the exterior of the container is smaller than a second predetermined limit value; and (b) preventing the readmission of air into the container through the air-admission opening when the pressure difference between the interior of the container and the exterior of the container is larger than the second predetermined limit value, wherein:

the first valve comprises: (a) a closure part, and (b) at least one flexible crosspiece for maintaining the closure part in a position in which the closure part obstructs the dispensing opening and thereby prevents the passage of the substance through the dispensing opening as long as a pressure difference between the interior of the container and the exterior of the container is smaller than the first predetermined limit value.

12. The valve system of Claim 11, wherein the closure part is substantially conical.

13. The valve system of Claim 11, wherein the at least one flexible crosspiece is configured to flex when the pressure difference between the interior of the container and the exterior of the container is larger than the first predetermined limit value, and to thereby allow the closure part to move so that the closure part does not prevent the passage of the substance through the dispensing opening.

14. The valve system of Claim 11, wherein the valve system comprises a plurality of the flexible crosspieces.

15. The valve system of Claim 11, wherein at least one of the flexible crosspieces is substantially S-shaped.